

REMARKS

Reconsideration and allowance of the present application are respectfully requested. Claims 1-17 remain pending in the application. By the foregoing amendment, a substitute Abstract is provided; and claims 1, 4, 5, 11, 12, 16 and 17 are amended.

Abstract

In numbered paragraph 3, page 3 of the Office Action, the Examiner objects to the abstract. In response, a substitute Abstract is provided herein. Withdrawal of the objection to the Abstract is respectfully requested.

Claim Objection

In numbered paragraph 5, page 4 of the Office Action, the Examiner objects to claim 16. To address the Examiner's concerns, claim 16 is amended. Withdrawal of the objection to claim 16 is respectfully requested.

35 U.S.C. §101

In numbered paragraph 7, page 4 of the Office Action, claims 1-16 are rejected under 35 U.S.C. §101, alleging that the claimed subject matter lacks a practical application of a judicial exception. Specifically, the Examiner asserts that the claimed subject matter does not produce a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature. While the rejection is traversed, to obviate the rejection, claim 1 is amended. For example, claim 1 is amended to recite, among other claimed features, a switchgear assembly module is formed from interchangeable components and has at least one central unit as well as at least one bus connection unit with a communication interface to control and

monitor the at least one electrical load in the outgoer of a low-voltage switchgear assembly,... and an internal bus is provided for communication from the central unit with the other components for the central unit to process data received from the other components which are located in the switchgear assembly module.

Withdrawal of the rejection under 35 U.S.C. §101 is respectfully requested.

35 U.S.C. §112, First Paragraph

In numbered paragraph 9, page 5 of the Office Action, claims 1-16 are rejected under 35 U.S.C. §112, first paragraph. Specifically, the Examiner asserts that the "disclosure is silent to the specifics of these 'protective functions' and how they're advantageous to the process." Applicants respectfully disagree with the Examiner's ultimate conclusion.

Applicants have clearly disclosed that the central components of the motor switching and control device are an integrated programmable controller and programmable motor protective functions (specification at page 1, lines 22-25) with respect to a patent publication DE 94 16 303 which was disclosed in an original IDS.

Further, Applicants have clearly detailed that the central unit has a microprocessor and associated data memory, and contains a programmable controller and configurable protective functions (e.g., page 3, lines 3-8). Applicants have further clarified that the protective functions for protection of the load to be controlled can also be configured on an application-specific basis (e.g., page 3, lines 10-12).

There are other alternative disclosures regarding the protective function. For example, alternatively, Applicants have disclosed a control/configuration unit provided for local control of the switchgear assembly module, and which allows

configuration of the protective functions of the switchgear assembly module (e.g., page 6, lines 5-7). In one exemplary instance, a programmable controller is generally programmed and the protective functions are configured by means of a programmer which is a standard PC or a standard PDA and in which a specific programming interface is installed (e.g., page 6, lines 31-34).

At least for these reasons, Applicants respectfully submit that there is a clear written disclosure and support as to the specifics of the claimed 'protective functions'; and as to how they're advantageous to the process. Withdrawal of the rejection under 35 U.S.C. §112, first paragraph, is respectfully requested.

35 U.S.C. §112, Second Paragraph

In numbered paragraphs 11-19, pages 5 and 6 of the Office Action, claims 1-7, 10-12 and 17 are rejected under 35 U.S.C. §112, second paragraph.

While Applicants traverse the Examiner's assertion, the pertinent claims are amended to obviate the rejection. Note however, in claim 12, the Examiner's assertion that "the external interface" lacks antecedent basis appears to be erroneous, since claim 2 does provide the asserted antecedent basis. For brevity, claim 12 is amended to succinctly recite "the external interface", with antecedent basis found in claim 2.

Withdrawal of the rejection under 35 U.S.C. §112, second paragraph, is respectfully requested.

U.S. Patent 6,032,203 (Heidhues)

In numbered paragraph 21, pages 6-11 of the Office Action, independent claim 1, along with all dependent claims, is rejected as being anticipated by U.S. Patent 6,032,203 (Heidhues). This rejection is respectfully traversed.

Applicants have disclosed a switchgear module (1) for controlling and monitoring an electric consumer in the outgoing feeder of low-voltage switchgear, said module comprising a communication interface for connecting to a bus system, a programmable controller and safety functions and being configured from individually interchangeable components (e.g., abstract). Said module is provided with at least one central unit (2) and a bus connection unit (6) and is also equipped with connection locations for receiving power units (4) and input/output units (7). The central unit (2) communicates with the remaining components in the switchgear module (1) via an internal bus.

The foregoing features are broadly encompassed by claim 1, which recites, among other features, A switchgear assembly module for controlling and monitoring at least one electrical load in an outgoer of a low-voltage switchgear assembly, having at least one communication interface for connection to a bus system, having a programmable controller and having configurable protective functions, wherein the switchgear assembly module is formed from interchangeable components and has at least one central unit as well as at least one bus connection unit with a communication interface to control and monitor the at least one electrical load in the outgoer of a low-voltage switchgear assembly, additional connection slots are provided for holding at least one power unit and at least one input/output unit, and an internal bus is provided for communication from the central unit with the other components for the central unit to process data received from the other components which are located in the switchgear assembly module.

Regarding claim 1, the Examiner variously asserts on page 7 of the Office Action, that the Heidhues patent variously reads on Applicants' claimed features, The Examiner's assertion is respectfully traversed.

The Heidhues patent is directed to the separation of the interface drivers for communication on one hand from the application software on the other hand. In a further step "a dynamic and open configurable interface system for switchgear applications with interchangeable sets of communication and interface driver modules" is to be achieved.

The Heidhues patent discloses that its further object and advantage is a dynamic and open configurable interface system for switchgear applications with interchangeable sets of communication and interface driver modules... The field bus data link 422 through Application Port S 402 and via a serial interface such as an RS-232 for standard personal computer systems. I/O port 42 connected for communication with a computer 40, e.g., a desk-top or laptop type of computer, via a serial data cable or link 41. Serial data cable 41 connects the group terminal ESG 400 to computer 40 via optical I/O port 42.

As disclosed in the Heidhues patent (col. 2, lines 51-54), the disclosed objectives of the Heidhues patent may be achieved by an interface system for a switchgear application which can be configured on a job-by-job basis to accommodate the different incompatible equipment.

Regarding the Examiner's assertion on page 7 of the Office Action that the Heidhues patent reads on a switchgear assembly module, Applicants respectfully disagree with the Examiner's ultimate conclusion. The Heidhues disclosure is merely related to **software** application in order to overcome its own problem. For

example, claim 1 of the Heidhues patent recites a method for interfacing between a plurality of processors in a switchgear system, wherein at least two of the processors have different protocols, ...a. defining an interface specification to govern the data exchange between the processors ...b. creating a first software module ...C. creating a second software module. In contrast, Applicants' claimed subject matter relates to a programmable **hardware** solution.

Further, Applicants' claimed features relate to a module, but not to the system as disclosed by the Heidhues patent. (A system may contain a number of modules.) Applicants' claimed subject matter is not an application per se, but is directed to a switchgear assembly module. In this regard, the Heidhues refers to an application which is synonymous with the "use of software"; whereas the claimed switchgear assembly relates to a hardware "module", e.g., an apparatus or device. Accordingly, the Examiner appears to have taken the software subject matters out of context to read the Heidhues software application on Applicants' switchgear assembly module.

Applicants' claim 1 encompasses a switchgear assembly module provided for controlling and monitoring at least one electrical load in the outgoer of a low-voltage switchgear assembly. For this purpose it comprises at least one central unit, a number of interchangeable components, additional connection slots for holding at least one power unit and at least one I/O unit, as well as an internal bus being provided for communication from the central unit with the other components being located in the module. These features lend support that the claimed subject matter is not based on virtual components only existent in software as the Examiner appears to have interpreted in applying the Heidhues patent. The Examiner appears to be overly broad in mixing hardware and software subject matters.

Specifically regarding the claimed switchgear assembly module, the Examiner appears to make his assertions on page 7 of the Office Action based on a reading in the Heidhues patent of a dynamic and open configurable interface system for switchgear applications with interchangeable sets of communication and interface driver modules (in col. 2, lines 46-48). However, the Examiner's broad reading is not supported by the actual disclosure in the Heidhues patent, since the Heidhues patent does not disclose Applicants' claimed features. Rather, it appears that the Examiner has placed his assertion based on the scant passages with no clear support for the specific features as asserted.

The scant disclosure in the Heidhues patent as relied upon by the Examiner is not substantiated with a clear description of how the goals shall be concretely achieved. The Heidhues patent merely states a problem, but not the technical solution. For example, the passage of "via a serial data cable or link 41 . Serial data cable 41 connects the group terminal ESG 400 to computer 40 via optical I/O port 42" (col. 10, lines 65-68) is applied to read on the claimed "low-voltage" and "communication interface" appear to be rather capricious and arbitrary, with no clear reason. The passage appears to be used to read on Applicants' claimed feature "additional connection slots", but a careful reading of the Heidhues patent shows no teaching that relate to these claimed features.

Likewise, the "electric power" (col. 1, line 36) and "I/O port 42" (col. 10, line 63) that the Examiner relies upon would not have taught or suggested additional connection slots provided for holding at least one power unit and at least one input/output unit as recited in Applicants' claim 1. Further, the applied passages would not be workable since the recited passages from the Heidhues patent will not

work without "electric power". The Heidhues patent does not disclose how the power supply is actually provided.

The Heidhues patent does not disclose anywhere in the specification comparable means for power supply. Accordingly, the Heidhues patent would not have taught or suggested the switchgear assembly module is formed from interchangeable components and has at least one central unit as well as at least one bus connection unit with a communication interface to control and monitor the at least one electrical load in the outgoer of a low-voltage switchgear assembly, additional connection slots are provided for holding at least one power unit and at least one input/output unit, as Applicants have recited in claim 1.

The Heidhues patent relates to a software structure of an interface system. Accordingly, "the connection to a bus system" (col. 4, lines 63-64) and the "field bus data" are taken out of context since this part of the description of the Heidhues patent relates to a software structure of an interface system.

Further, the Examiner relies on the passage "appears to be the PLC A350" (figure 1) and "computer" (figure 8, element 40) to read on the Applicants' claimed feature of "internal bus being provided for communication from the central unit with the other components".

Applicants respectfully disagree with the Examiner's assertion. The "PLC A350" that the Examiner relies on is not the equivalent of Applicants' central unit. Applicants also respectfully submit that the "computer" the Examiner relies upon from figure 8 is not the same as "the other components" as Applicants have claimed.

The "other components" as Applicants have recited are within the "switchgear assembly module". According to Fig. 8 of the Heidhues patent, "the computer" as

relied upon by the Examiner, does not belong to the assembly element 400, but is linked via cable 41 in port 42. This disclosure does not support The Examiner's assertion.

At least for these additional reasons, the Heidhues patent would not have taught or suggested the switchgear assembly module is formed from interchangeable components and has at least one central unit as well as at least one bus connection unit with a communication interface to control and monitor the at least one electrical load in the outgoer of a low-voltage switchgear assembly, additional connection slots are provided for holding at least one power unit and at least one input/output unit, and an internal bus is provided for communication from the central unit with the other components for the central unit to process data received from the other components which are located in the switchgear assembly module, as Applicants have recited in claim 1.

As such, Applicant's independent claim 1 is allowable. The remaining claims variously depend from independent claim 1 and recite additional advantageous features which further distinguish over the document relied upon by the Examiner. As such, the present application is in condition for allowance.

Withdrawal of the rejection under 35 U.S.C. 102(b) is respectfully requested.

Conclusion

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the application is in condition for allowance and a Notice of Allowance is respectfully solicited.

Respectfully submitted,

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